Game Changing Development

Arc Jet Exposure of Ablative and Non-Oxide CMC TPS for Planetary Probe and Sample Return Applications

Completed Technology Project (2016 - 2018)

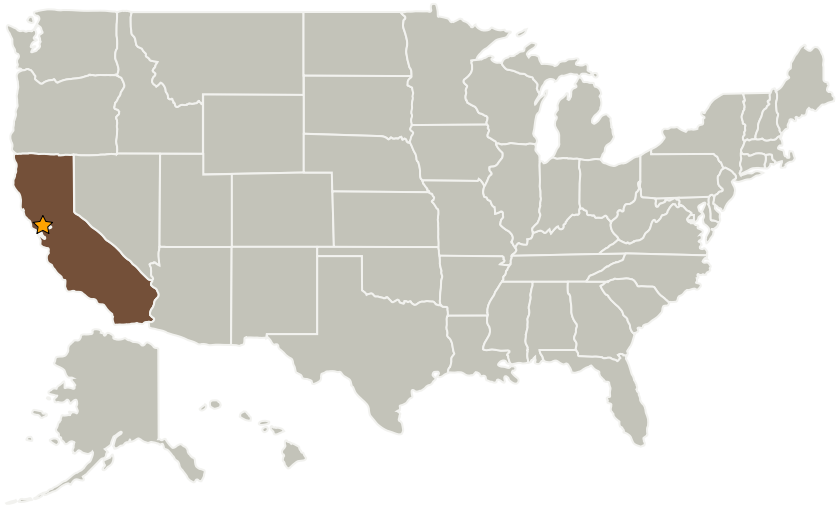
Project Introduction

NASA is making available its unique testing facilities to promote commercial space

Anticipated Benefits

Development of new TPS materials that can replace old heritage systems which suffer from high fabrication and installation costs as well as raw material obsolescence issues

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Ames Research Center(ARC)	Lead Organization	NASA Center	Moffett Field, California

Primary U.S. Work Locations
California

Arc Jet Exposure of Ablative and Non-Oxide CMC TPS for Planetary Probe and Sample Return Applications

Table of Contents

Arc Jet Exposure of Ablative and Non-Oxide CMC TPS for Planetary Probe and Sample Return Applications

Completed Technology Project (2016 - 2018)

Project Transitions

August 2016: Project Start

September 2018: Closed out

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Ames Research Center (ARC)

Responsible Program:

Game Changing Development

Project Management

Program Director:

Mary J Werkheiser

Program Manager:

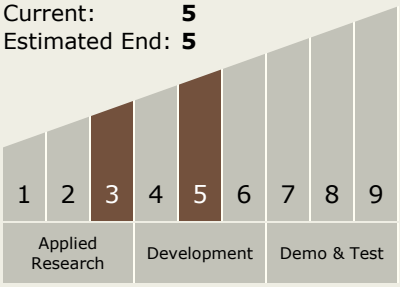
Gary F Meyering

Principal Investigator:

Ethiraj Venkatapathy

Technology Maturity (TRL)

Start: **3**
Current: **5**
Estimated End: **5**



Arc Jet Exposure of Ablative and Non-Oxide CMC TPS for Planetary Probe and Sample Return Applications

Completed Technology Project (2016 - 2018)

Target Destination

Foundational Knowledge